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10/658,631	09/08/2003	Naoyuki Sato	SONY-26700	3451

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EXAMINER
HOANG, HIEU T

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

    A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>13 August 2008</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-25</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-25</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.　　This office action is in response to the amendment filed on 08/13/2008.

2.　　Claims 1-25 are pending.

3.　　The previous final office action is withdrawn. However, applicant's amendment
necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS
ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension
of time policy as set forth in 37 CFR 1.136(a).

Response to Amendment

4.　　Previous claim objection and has been withdrawn due to the amendment.

5.　　The 35 U.S.C. 101 and 112 rejections have been withdrawn due to the amendment.

Response to Arguments

6.　　Applicant's arguments filed have been fully considered but they are moot in view of new
ground(s) of rejection.

Claim Rejections - 35 USC § 103

7.　　The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all
obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth
> in section 102 of this title, if the differences between the subject matter sought to be patented and the prior
> art are such that the subject matter as a whole would have been obvious at the time the invention was made
> to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be
> negatived by the manner in which the invention was made.

8.   Claims 1-5, 6-13, 15-18 and 20-24 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Ong et al. (US 2003/0182450, hereafter Ong), in view of Ericsson et al.

(SyncML Sync Protocol, hereafter Ericsson), further in view of Hepper et al. (US 2003/0220966,

hereafter Hepper)

9.   For claim 15, Ong discloses a method of providing an interface to one or more

synchronization applications resident within a first device coupled to a network of devices

(abstract), the method comprising:

- sending and receiving messages to and from the one or more synchronization applications

  through an interface layer to one or more synchronization protocol, to synchronize data

  between the first device and at least one other device within the network of devices

  ([0046] lines 7-10, synchronization client application, [0139], API interface between

  applications and synchronization plug-in modules for synchronization tasks, [0143] lines

  1-9, a user client synchronizes with a server or other devices using an synchronization

  protocol such as SyncML or WebDAV),

- generating and receiving communications at the interface layer to complete data

  synchronization between the first device and the at least one other device within the

  network of devices ([0139], API for document conversion, differencing, and merging of

  documents created or edited on more sophisticated devices for synchronizing documents

  of applications between devices, [0143], supporting a variety of synchronization

  protocols such as SyncML, WebDAV).

Ong does not explicitly disclose one or more synchronization protocol stacks or a synchronization layer.

However, Ericsson discloses the same (fig. 1, SyncML adapter is the synchronization protocol stack or synchronization layer between interface layer I/F and transport layer)

Therefore, it would have been obvious for one skilled in the art at the time of the invention to combine the teachings of Ong and Ericsson to apply the framework of Ericsson in order to develop a synchronization method supporting a plurality of synchronization protocols as one described by Ong.

Ong-Ericsson does not explicitly disclose wherein the messages between the one or more synchronization applications and the interface layer are independent of a synchronization protocol used between the interface layer and the synchronization protocol stack.

However, in the same field of endeavor, Hepper discloses a dynamic selection engine having an interface ([0026], [0027] lines 6-8) to select one or more sync modules ([0027] lines 1-13, synchronization protocols) dynamically based on capabilities and type of user device as well as utilized communication channel ([0026]), wherein communications between one or more applications and the dynamic selection engine are independent of the synchronization protocol (fig. 5, step 100, client application starts synchronization, step 500, dynamic selection engine selects an appropriate synchronization module based on dynamic data)

It would have been obvious for one skilled in the art at the tie of the invention to combine the teachings of Ong, Ericsson and Hepper to implement a dynamic selection engine to dynamically select a most appropriate synchronization protocol independently of user applications.

10.   For claim 21, Ong discloses an apparatus for providing an interface to one or more

synchronization applications resident within a first device coupled to a network of devices

(abstract), the apparatus comprising a memory ([0180], memory) comprising:

- means for sending and receiving messages to and from the one or more synchronization

    applications through an interface layer to one or more synchronization protocols, to

    synchronize data between the first device and at least one other device within the network

    of devices ([0139], API interface between applications and plug-in modules for

    synchronization tasks, [0143] lines 1-5, synchronization protocols, lines 5-9, a user client

    synchronizes with a server (or some other devices) using an email protocol

- means for generating and receiving communications at the interface layer to complete

    data synchronization between the first device and the at least one other device within the

    network of device (Ong, [0139], API for document conversion, differencing, and merging

    of documents created or edited on more sophisticated devices for synchronizing

    documents of applications between devices, [0143], supporting a variety of

    synchronization protocols such as SyncML, WebDAV).

        Ong does not explicitly disclose one or more synchronization protocol stacks or a

synchronization layer.

        However, Ericsson discloses the same (fig. 1, SyncML adapter is the synchronization

protocol stack or synchronization layer between interface layer I/F and transport layer)

        Therefore, it would have been obvious for one skilled in the art at the time of the

invention to combine the teachings of Ong and Ericsson to apply the framework of Ericsson in

order to develop a synchronization method supporting a plurality of synchronization protocols as one described by Ong.

Ong-Ericsson does not explicitly disclose wherein the messages between the one or more synchronization applications and the interface layer are independent of a synchronization protocol used between the interface layer and the synchronization protocol stack.

However, in the same field of endeavor, Hepper discloses a dynamic selection engine having an interface ([0026], [0027] lines 6-8) to select one or more sync modules ([0027] lines 1-13, synchronization protocols) dynamically based on capabilities and type of user device as well as utilized communication channel ([0026]), wherein communications between one or more applications and the dynamic selection engine are independent of the synchronization protocol (fig. 5, step 100, client application starts synchronization, step 500, dynamic selection engine selects an appropriate synchronization module based on dynamic data)

It would have been obvious for one skilled in the art at the tie of the invention to combine the teachings of Ong, Ericsson and Hepper to implement a dynamic selection engine to dynamically select a most appropriate synchronization protocol independently of user applications.

11.   For claims 16 and 22, the claims are rejected as in claims 15 and 21. Ong-Ericsson-Hepper further discloses the synchronization application is selected from a group consisting of Personal Information Manager (PIM) sync, contents distribution, and contents upload (Ong, [0005] lines 9-18, PIM, [0037], [0038], downloading and uploading synchronizations are possible).

12.   For claims 17 and 23, the claims are rejected as in claims 15 and 21. Ong-Ericsson-

Hepper further discloses the interface layer is an application programming interface (API) (Ong,

[0139]).

13.   For claims 18 and 24, the claims are rejected as in claims 15 and 21. Ong-Ericsson-

Hepper further discloses the interface layer is protocol independent (Ong, [0139], an application

programming interface API is not a protocol, Hepper, [0026], an interface for selecting a

synchronization protocol independently of the synchronization protocol).

14.   For claim 20, the claim is rejected as in claim 15. Ong-Ericsson discloses the

communications generated at the interface layer are sent to a network layer via one

synchronization protocol within the first device, and communications received at the interface

layer are received from one synchronization protocol stacks via the network layer (Ericsson, fig.

1, at the sending side, data goes from the interface layer (SyncML I/F) to synchronization layer

(SyncML adapter) to the network layer, and vice versa at the receiving side).

15.   For claim 1, Ong discloses a first device to synchronize data with a second device (fig.

1B, server and small device synchronizing), the first device (server) comprising:

    a memory ([0180], memory) comprising:

    ▪   one or more applications (fig. 2, server 102 contains office applications, [0028]-[0030],

         sound, video, and word processing applications);

- a network layer coupled to interface with the second device ([0031] lines 12-16, network layer between the server and the small device, [0038] lines 19-21, HTTP or XML network layer);

- synchronization protocols to provide a synchronization protocol between the first device and the second device ([0143] lines 1-5, synchronization protocols, lines 5-9, a user client synchronizes with a server (or some other devices)); and

- an interface layer coupled to communicate with the one or more applications and the synchronization layer to provide generic synchronization communications between the one or more applications and the synchronization layer ([0139], an application programming interface API to communicate with the documents (or applications) and the synchronization plug-in modules (synchronization layer, [0143] lines 1-5, SyncML and WebDAV synchronization protocols);

Ong does not explicitly disclose a synchronization layer coupled to the network layer and the synchronization layer consists of synchronization protocol(s).

However, Ericsson discloses a synchronization layer coupled to the network layer and the synchronization layer consists of synchronization protocol(s) (section 1.1, fig. 1, SyncML I/F is the interface layer, SyncML adapter is the synchronization layer, coupled to HTTP/WSP/OBEX or the network layer).

Therefore, it would have been obvious for one skilled in the art at the time of the invention to combine the teachings of Ong and Ericsson to apply the framework of Ericsson in order to develop a synchronization method supporting a plurality of synchronization protocols as one described by Ong.

Ong-Ericsson does not explicitly disclose wherein the messages between the one or more synchronization applications and the interface layer are independent of the synchronization protocol used between the interface layer and the synchronization protocol stacks.

However, in the same field of endeavor, Hepper discloses a dynamic selection engine having an interface ([0026], [0027] lines 6-8, interface) to select one or more sync modules ([0027] lines 1-13, synchronization protocols) dynamically based on capabilities and type of user device as well as utilized communication channel ([0026]), wherein communications between one or more applications and the dynamic selection engine are independent of the synchronization protocol (fig. 5, step 100, client application starts synchronization, step 500, dynamic selection engine selects an appropriate synchronization module based on dynamic data)

It would have been obvious for one skilled in the art at the tie of the invention to combine the teachings of Ong, Ericsson and Hepper to implement a dynamic selection engine to dynamically select a most appropriate synchronization protocol independently of user applications.

16.   For claim 8, Ong discloses a network comprising one or more network devices (fig. 2, a server, a workstation, a small device); and an application device comprising:

- one or more applications (fig. 2, server 102 contains office applications, [0028]-[0030], sound, video, and word processing applications);

- a network layer coupled to interface with the one or more network devices ([0031] lines 12-16, network layer between the server and the small device, [0038] lines 19-21, HTTP or XML network layer);

- synchronization protocols to provide a synchronization protocol between the application device and the one or more network devices ([0143] lines 1-5, synchronization protocols, lines 5-9, a user client synchronizes with a server (or some other devices)); and

- an interface layer coupled to communicate with the one or more applications and the synchronization layer to provide generic synchronization communications between the one or more applications and the synchronization layer ([0139], an application programming interface API to communicate with the documents (or applications) and the synchronization plug-in modules (synchronization layer, [0143] lines 1-5, SyncML and WebDAV synchronization protocols);

Ong does not explicitly disclose a synchronization layer coupled to the network layer and the synchronization layer consists of synchronization protocol(s).

However, Ericsson discloses a synchronization layer coupled to the network layer and the synchronization layer consists of synchronization protocol(s) (section 1.1, fig. 1, SyncML I/F is the interface layer, SyncML adapter is the synchronization layer, coupled to HTTP/WSP/OBEX or the network layer).

Therefore, it would have been obvious for one skilled in the art at the time of the invention to combine the teachings of Ong and Ericsson to apply the framework of Ericsson in order to develop a synchronization method supporting a plurality of synchronization protocols as one described by Ong.

Ong-Ericsson does not explicitly disclose wherein the messages between the one or more synchronization applications and the interface layer are independent of any synchronization protocol used between the interface layer and the synchronization layer

However, in the same field of endeavor, Hepper discloses a dynamic selection engine

having an interface ([0026], [0027] lines 6-8, interface) to select one or more sync modules

([0027] lines 1-13, synchronization protocols) dynamically based on capabilities and type of user

device as well as utilized communication channel ([0026]), wherein communications between

one or more applications and the dynamic selection engine are independent of the

synchronization protocol (fig. 5, step 100, client application starts synchronization, step 500,

dynamic selection engine selects an appropriate synchronization module or protocol based on

dynamic information)

It would have been obvious for one skilled in the art at the tie of the invention to combine

the teachings of Ong, Ericsson and Hepper to implement a dynamic selection engine to

dynamically select a most appropriate synchronization protocol independently of user

applications.

17.   For claims 2 and 9, the claims are rejected as in claims 1 and 8, Ong-Ericsson-Hepper

further discloses at least one of the one or more applications comprises a synchronization

application (Ong, [0046] lines 7-10).

18.   For claims 3 and 10, the claims are rejected as in claims 2 and 9. Ong-Ericsson-Hepper

further discloses the synchronization application is selected from a group consisting of Personal

Information Manager (PIM) sync, contents distribution, and contents upload (Ong, [0005] lines

9-18, PIM, [0037], [0038], downloading and uploading synchronizations are possible).

19.   For claims 4 and 11, the claims are rejected as in claims 1, 8. Ong-Ericsson-Hepper

further discloses the interface layer is an application programming interface (API) (Ong, [0139]).

20.   For claims 5 and 12, the claims are rejected as in claims 1, 8. Ong-Ericsson-Hepper

further discloses the interface layer is protocol independent (Ong, [0139], an application

programming interface API is not a protocol, Hepper, [0026], an interface for selecting a

synchronization protocol independently of the synchronization protocol).

21.   For claims 6 and 13, the claims are rejected as in claims 1 and 8. Ong-Ericsson-Hepper

further discloses synchronization layer comprises a synchronization protocol stack (Ong, [0143],

synchronization layer contains a synchronization protocol stack such as SyncML and WebDAV,

etc.).

22.   Claims 19 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ong-

Ericsson-Hepper, as applied to claims 15, and 21, in view of Stevenson et al. (US 2003/0014483,

hereafter Stevenson)

23.   For claims 19 and 25, the claim is rejected as in claims 15, 21. Ong-Ericsson-Hepper

further discloses the synchronization protocol stack is selected from a group consisting of

SyncML and Web Distributed Authoring and Versioning (WebDAV) (Ong, [0143]).

        Ong-Ericsson discloses other protocols for synchronization such as SOAP and epXML

(Ong, [0143]). Ong-Ericsson does not disclose Information Content Exchange (ICE).

However, Stevenson discloses Information Content Exchange (ICE, [0107])

Therefore, it would have been obvious for one skilled in the art at the time of the invention to combine the teachings of Ong, Ericsson and Hepper and Stevenson to implement a synchronization protocol stack consisting of SyncML, WebDAV, and ICE to provide more flexibility and functionality to the system.

24.   Claims 7 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ong-Ericsson-Hepper, as applied to claims 5, 13, in view of Stevenson.

25.   For claims 7 and 14, the claim is rejected as in claims 5, 13. Ong-Ericsson-Hepper further discloses the synchronization protocol stack is selected from a group consisting of SyncML and Web Distributed Authoring and Versioning (WebDAV) (Ong, [0143]).

Ong-Ericsson discloses other protocols for synchronization such as SOAP and epXML (Ong, [0143]). Ong-Ericsson does not disclose Information Content Exchange (ICE).

However, Stevenson discloses Information Content Exchange (ICE, [0107])

Therefore, it would have been obvious for one skilled in the art at the time of the invention to combine the teachings of Ong, Ericsson, Hepper and Stevenson to implement a synchronization protocol stack consisting of SyncML, WebDAV, and ICE to provide more flexibility and functionality to the system.

Conclusion

26.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure is included in form PTO 392.

27.   Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

         A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

28.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Hieu T. Hoang whose telephone number is 571-270-1253. The

examiner can normally be reached on Monday-Thursday, 8 a.m.-5 p.m., EST.

         If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, John Follansbee can be reached on 571-272-3964. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HH

/Kenny S Lin/

Primary Examiner, Art Unit 2452